

IN THE CLAIMS:

Please cancel without prejudice Claims 1-47.

Please add the newly-drafted Claims 48-71.

48. (New) A recording medium having video data, a plurality of programs, and a table recorded thereon, wherein

each of the plurality of programs shows a playback control procedure of the video data,

the table includes (1) identification information of each of the plurality of programs, and (2) information showing that each of the plurality of programs belongs to one of a movie-mode and an enhanced-mode,

one of the plurality of programs includes a command for branching, and the branching command specifies a branch destination using indirect referencing via the table.

49. (New) The recording medium of claim 48 wherein in the table, a title number is assigned to each pair of (1) the identification information and (2) the information, and

the indirect referencing is to specify a program of the branch destination, using the title numbers.

50. (New) The recording medium of Claim 48, wherein the enhanced-mode is a mode for causing a virtual machine to execute a program, and

an enhanced-mode program is described in a virtual machine-oriented programming language.

51. (New) The recording medium of Claim 48, wherein
a movie-mode program and an enhanced-mode program each are executed by two or more execution modules,
the two or more execution modules are resident programs on a same layer in a control hierarchy, and
the playback control procedure is a process description of a process for the same layer, described using one of (1) a command interpretable by the two or more execution modules and (2) a class structure function supplied from the two or more execution modules.

52. The recording medium of Claim 51 wherein
the class structure function is one of (1) a function for causing a playback device to execute a playback control based on a predefined playback path, (2) a function for setting a predetermined value to a register in the playback device and (3) a function for acquiring the value set to the register.

53. (New) The recording medium of Claim 52, wherein
the value set to the register is a value showing one of (1) an audio setting in the playback device, (2) a subtitle setting in the playback device, (3) an angle setting in the playback device, (4) a currently played title, (5) a currently played chapter, and (6) a current playback point.

54. (New) The recording medium of Claim 52, having pieces of playlist information recorded thereon, wherein

each piece of the playlist information defines a playback path by arranging pieces of information showing playback sections in the video data according to a playback order, and

the playback control executed with the class structure function is based on the playback path defined by each piece of the playlist information.

55. (New) The recording medium of Claim 54, wherein

each of the plurality of programs includes a function call for calling the class structure function for executing the playback control,

the function call includes two arguments,

of the two arguments, a first argument specifies a piece of the playlist information, and

a second argument specifies a starting point in the playback path.

56. (New) The recording medium of Claim 55, wherein

the starting point is specified using one of a playback section, a playback time, and a chapter.

57. (New) The recording medium of Claim 53, wherein

the branching is to branch from the movie-mode program to the enhanced-mode program,

the playback control procedure performed by the movie-mode program is to specify a starting point in the playback path defined by a piece of the playback information for playback execution, and

the playback control procedure performed by the enhanced-mode program is to specify the starting point in the playback path defined by the same piece of the playback information for playback execution.

58. (New) The recording medium of Claim 48, wherein
a movie-mode program includes a button command,
the button command is a command for branching to the enhanced-mode program,
and is recorded on the recording medium as a multiplexed stream after being multiplexed with the video data and subtitle data, and
each piece of the subtitle data is image data of a button, and the button command is executed when a confirmation operation is conducted with respect to the image data of the button.

59. (New) A playback device relating to a recording medium having video data, a plurality of programs, and a table including indexes pertaining to the respective plurality of programs recorded thereon, comprising:

a plurality of modules operable to execute the respective plurality of programs, the plurality of modules including a module corresponding to a movie-mode and a module corresponding to an enhanced-mode; and

a manager operable to control branching between the plurality of programs, wherein

the table is information showing that each of the plurality of programs belongs to either a movie-mode or an enhanced-mode,

the branching is described, for each of the plurality of programs, using indirect referencing via the table, and the manager decides, at a time of the branching, a module for executing a program of a branch destination by referring to the table.

60. (New) The playback device of Claim 59, wherein
in the table, a title number is assigned to each pair of (1) identification information of each of the plurality of programs and (2) the information, and
the indirect referencing is to specify a program of the branch destination, using the title numbers.

61. (New) The playback device of Claim 59, wherein
the movie-mode corresponding module has a virtual machine, and
an enhanced-mode program is described in a virtual machine-oriented programming language.

62. (New) The playback device of Claim 59, wherein
a movie-mode program and an enhanced-mode program each are executed by two or more execution modules,
the play back device further comprising:
a register; and
a playback control engine operable to perform a functional operation in response to a direction from each of the movie-mode and the enhanced-mode corresponding modules, wherein
the functional operation is one of (1) receiving a value from one of the modules and setting the value to the register, (2) acquiring the value from the register and passing the

value over to one of the modules, and (3) playing the video data according to a predetermined playback path.

63. (New) The playback device of Claim 62, wherein

the value set to the register is a value showing one of (1) an audio setting in the playback device, (2) a subtitle setting in the playback device, (3) an angle setting in the playback device, (4) a currently played title, (5) a currently played chapter, and (6) a current playback point.

64. (New) The playback device of claim 62, wherein

pieces of playlist information are recorded on the recording medium,
each piece of the playlist information defines a playback path by arranging pieces of information showing playback sections in the video data according to a playback order, and
a playback control executed by the playback control engine is based on the defined playback path.

65. (New) The playback device of claim 64, wherein

each of the plurality of programs includes a function call for calling, via the movie-mode or the enhanced-mode corresponding module, the functional operation of playing the video data performed by the playback control engine,
the function call includes two arguments,
of the two arguments, a first argument specifies a piece of the playlist information, and
a second argument specifies a starting point in the playback path.

66. (New) The playback device of Claim 65, wherein
the starting point is specified using one of a playback section, a playback time,
and a chapter.
67. (New) The playback device of Claim 64, wherein
the branching is to branch from the movie-mode program to the enhanced-mode
program,
the playback control procedure performed by the movie-mode program is to
specify the starting point and have the playback control engine perform playback, and
the playback control procedure performed by the enhanced-mode program is to
specify the same starting point in the playback path and have the playback control engine
perform playback.
68. (New) The playback device of Claim 59, comprising:
a demultiplexer operable to demultiplex a multiplex stream to obtain a button
command, the video data, subtitle data;
an image decoder operable to decode image data of a button; and
a video decoder operable to decode the video data, wherein
a movie-mode program includes the button command, the button command is a
command for branching to the enhanced-mode program, and is recorded on the recording
medium as the multiplex stream after being multiplexed with the video data and the subtitle data,
each piece of the subtitle data is the image data, and the movie-mode
corresponding module executes the button command when a confirmation operation is conducted
with respect to the image data.

69. (New) A playback processing program relating to a recording medium having video data, a plurality of programs, a table including indexes pertaining to the respective programs recorded thereon, comprising the following processing:

having a computer perform a plurality of execution steps in each of which one of the plurality of programs is executed, and a control step for controlling branching between the plurality of programs, the plurality of execution steps including an execution step corresponding to a movie-mode and an execution step corresponding to an enhanced-mode, wherein

the table is information showing that each of the plurality of programs belongs to either a movie-mode or an enhanced-mode,

the branching is described, for each of the plurality of programs, using indirect referencing via the table, and

the control step is a step for deciding, at a time of the branching, an execution step for executing a program of a branch destination by referring to the table.

70. (New) A playback method relating to a recording medium having video data, a plurality of programs, a table including indexes pertaining to the respective programs recorded thereon, comprising the following steps:

a plurality of execution steps in each of which one of the plurality of programs is executed, the plurality of execution steps including an execution step corresponding to a movie-mode and an execution step corresponding to an enhanced-mode; and

a control step for controlling branching between the plurality of programs, wherein

the table is information showing that each of the plurality of programs belongs to either a movie-mode or an enhanced-mode,

the branching is described, for each of the plurality of programs, using indirect referencing via the table, and

the control step is a step for deciding, at a time of the branching, an execution step for executing a program of a branch destination by referring to the table.

71. (New) A recording method of a recording medium, comprising the following steps:

creating application data; and

recording the created application data on the recording medium, wherein

the application data includes video data, a plurality of programs, and a table,

each of the plurality of programs shows a playback control procedure of the video data,

the table includes (1) identification information of each of the plurality of programs, and (2) information showing that each of the plurality of programs belongs to either a movie-mode or an enhanced-mode,

one of the plurality of programs includes a command for branching, and

the branching command specifies a branch destination using indirect referencing via the table.